

217/782-2113

FEDERALLY ENFORCEABLE STATE OPERATING PERMIT -- RENEWAL

Permittee

TSC Pyroferriic International, Inc.
Attn: Tim Olrick
39105 North Magnetis Boulevard
Wadsworth, Illinois 60083

Application No.: 93060092

I.D. No.: 035020AAK

Applicant's Designation: IAPC PERMIT

Date Received: December 5, 2005

Subject: Iron Powder Core Manufacturing Processes

Date Issued: May 1, 2006

Expiration Date: May 1, 2011

Location: 507 East Madison Street, Toledo

This Permit is hereby granted to the above-designated Permittee to OPERATE emission source(s) and/or air pollution control equipment consisting of equipment listed in Attachment B, pursuant to the above-referenced application. This Permit is subject to standard conditions attached hereto and the following special condition(s):

- 1a. This federally enforceable state operating permit is issued to limit the emissions of air pollutants from the source to less than major source thresholds (i.e., 100 tons/year for VOM, 10 tons/year for a single HAP and 25 tons/year for totaled HAP). As a result the source is excluded from the requirement to obtain a Clean Air Act Permit Program (CAAPP) permit. The maximum emissions of this source, as limited by the conditions of this permit, are described in Attachment A.
- b. Prior to issuance, a draft of this permit has undergone a public notice and comment period.
- c. This permit supersedes all operating permits for this location.
2. The emissions from this facility shall not exceed the following limits:

<u>Pollutant</u>	<u>Monthly Emissions</u> <u>(Lbs/Month)</u>	<u>Annual Emissions</u> <u>(Tons/Year)</u>
VOM	5,000	22.0
HAP*	1,700	8.5

* These HAP emissions are emitted from the coatings.

- 3a. Emissions and operation of equipment shall not exceed the following limits:

<u>Operation</u>	<u>VOM Usage</u> <u>(Tons/Month)</u>	<u>VOM Usage</u> <u>(Tons/Year)</u>	<u>VOM Emissions</u> <u>(Tons/Month)</u>	<u>VOM Emissions</u> <u>(Tons/Year)</u>
Coolant Usage	1.3	10.0	1.3	10.0

These limits are based on maximum operations at 8,760 hours per year.

- b. Emissions and operation of equipment shall not exceed the following limits:

<u>Operation</u>	<u>(Lb VOM/Gal)</u>	<u>Painting Usage (Gal/Mo)</u>	<u>Usage (Gal/Yr)</u>	<u>VOM Emissions (Lb/Mo)</u>	<u>(Tons/Yr)</u>
Painting*	3.5	686	6,857	2,400	12.0

These limits are based on the requested usages and allowable coating limit pursuant to 215.204(j).

* Clean-up solvent is also used as a reducer for the paint. Included in the total VOM emissions (lb/month and tons/year) are emissions from the clean-up solvent.

- c. For the purpose of this permit it shall be assumed that all the solvent in the paint (including all additional solvents) and coolant which are purchased are emitted.
- d. Compliance with annual limits shall be determined on a monthly basis from the sum of the data for the current month plus the preceding 11 months.
4. The emissions of Hazardous Air Pollutants (HAPs) as listed in Section 112(b) of the Clean Air Act shall not equal or exceed 10 tons per year of any single HAP or 25 tons per year of any combination of such HAPs, or such lesser quantity as USEPA may establish in rule which would require the Permittee to obtain a CAAPP permit from the Illinois EPA. As a result of this condition, this permit is issued based on the emissions of any HAP from this source not triggering the requirement to obtain a CAAPP permit from the Illinois EPA.
- 5a. The Permittee shall maintain records of the following items:
- i. Coolant Usage (tons/month and tons/year).
 - ii. Paint Usage (gallons/month and gallons/year).
 - iii. Clean-up Solvents Usage (gallons/month and gallons/year).
 - iv. VOM content of materials used (lb VOM/gallon).
 - v. HAP content of materials used (lb VOM/gallon).
 - vi. VOM emissions (ton VOM/year).
 - vii. HAP emissions (ton HAP/year).
- b. All records and logs required by this permit shall be retained at a readily accessible location at the source for at least three years from the date of entry and shall be made available for inspection and

copying by the Illinois EPA or USEPA upon request. Any records retained in an electronic format (e.g., computer) shall be capable of being retrieved and printed on paper during normal source office hours so as to be able to respond to an Illinois EPA or USEPA request for records during the course of a source inspection.

6. If there is an exceedance of the requirements of this permit as determined by the records required by this permit, the Permittee shall submit a report to the Illinois EPA's Compliance Section in Springfield, Illinois within 30 days after the exceedance. The report shall include the emissions released in accordance with the recordkeeping requirements, a copy of the relevant records, and a description of the exceedance or violation and efforts to reduce emissions and future occurrences.
7. Two (2) copies of required reports and notifications concerning equipment operation or repairs, performance testing or a continuous monitoring system shall be sent to:

Illinois Environmental Protection Agency
Division of Air Pollution Control
Compliance Section (#40)
P.O. Box 19276
Springfield, Illinois 62794-9276

and one (1) copy shall be sent to the Illinois EPA's regional office at the following address unless otherwise indicated:

Illinois Environmental Protection Agency
Division of Air Pollution Control
9511 West Harrison
Des Plaines, Illinois 60016

8. Emissions and operation of equipment shall not exceed the following limits:

<u>Item of Equipment</u>	<u>Operating Hours (Hours/Yr)</u>	<u>Iron Powder Usage (Tons/Mo)</u>	<u>Particulate Emissions (Lbs/Mo)</u>	<u>(Tons/Yr)</u>
Iron Powder Mixing	8,760	100	100.0	0.5
Iron Powder Preparation (Chopping, Sifting and Lubricating)	8,760	100	100.0	0.5

These limits are based on the information provided in the permit application.

- 9a. Emissions and operation of equipment shall not exceed the following limits:

<u>Operation</u>	Operating	E M I S S I O N S			
	Hours	NO _x		CO	
	(Hrs/Year)	(Lbs/Hr)	(Tons/Yr)	(Lbs/Hr)	(Tons/Yr)
Natural Gas Combustion	8,760	0.10	0.44	0.084	0.368

These limits are based on the information provided in the permit application.

- b. Natural gas shall be the only fuel combusted in the equipment covered by this permit. Use of any other fuel will require revision of this permit.
- 10a. The Permittee shall, in accordance with the manufacturer(s) and/or vendor(s) recommendations, perform periodic maintenance on the pollution control equipment covered under this permit such that the pollution control equipment be kept in proper working condition and not cause a violation of the Environmental Protection Act or regulations promulgated therein.
- b. For each fabric filter, the Permittee shall, at a minimum, perform internal and external inspections, twice each year. Permittee shall inspect for leaks, holes, seals, wear, and other problems, and promptly repair all problems found.
- c. The Permittee shall maintain operating and maintenance logs for all control equipment, including: operating data, with pressure drop and stack condition, on daily startup and every twenty-four hours thereafter.
- 11. No person shall cause or allow any visible emissions of fugitive particulate matter from any process, including material handling or storage activity, beyond the property line of the emission source, pursuant to 35 Ill Adm. Code 212.301.
- 12. In the event that the operation of this source results in an odor nuisance, the Permittee shall take appropriate and necessary actions to minimize odors, including but not limited to, changes in raw material or installation of controls, in order to eliminate the nuisance.

If you have any questions on this, please call Dwayne Booker at 217/782-2113.

Donald E. Sutton, P.E.
 Manager, Permit Section
 Division of Air Pollution Control

DES:DLB:psj

cc: IEPA, FOS Region 3
 Lotus Notes

Attachment A - Emissions Summary

This attachment provides a summary of the maximum emissions from the source operating in compliance with the requirements of this federally enforceable permit. In preparing this summary, the Illinois EPA used the annual operating scenario which results in maximum emissions from such a plant. The resulting maximum emissions are below the levels, e.g., 100 tons per year of VOM, at which this source would be considered a major source for purposes of the Clean Air Act Permit Program. Actual emissions from this source will be less than predicted in this summary to the extent that less material is handled and control measures are more effective than required in this permit.

	E M I S S I O N S				(Tons/Year)	
	HAPs					
<u>Emissions Unit</u>	<u>NO_x</u>	<u>CO</u>	<u>PM</u>	<u>VOM</u>	<u>Single</u>	<u>Combined</u>
Coolant Usage *				10.00		
Coating Usage **				12.00		
Iron Powder Coatings Usage ***				8.50		
Iron Powder Mixing			0.5			
Iron Powder Preparation (Chopping, Sifting, and Lubricating)			0.5			
Core Grinding				0.44		
Natural Gas Combustion	0.44	0.0368				
Totals	0.44	0.0368	1.0	30.94	< 10	< 25

* The coolant is comprised of two primary parts: an aliphatic hydrocarbon and a metal-working fluid which is primarily oil.

** The coatings include thinners and clean-up solvents.

*** The coatings include thinners and clean-up solvents used.

DES:DLB:psj

Attachment B - List of Permitted Equipment

Mixing (powder and acetone and phosphatizing solution); 8 mixers and 3 powder drying ovens.

Chopping, sifting and lubricating; controlled by a baghouse.

Core grinding.

Natural gas combustion (4 curing ovens).

Painting; two booths.

Coolant (a mixture of aliphatic hydrocarbon and a metalworking fluid which is primarily oil).

Sludge drying oven.

DES:DLB:psj